

Testing Bounded Arboricity

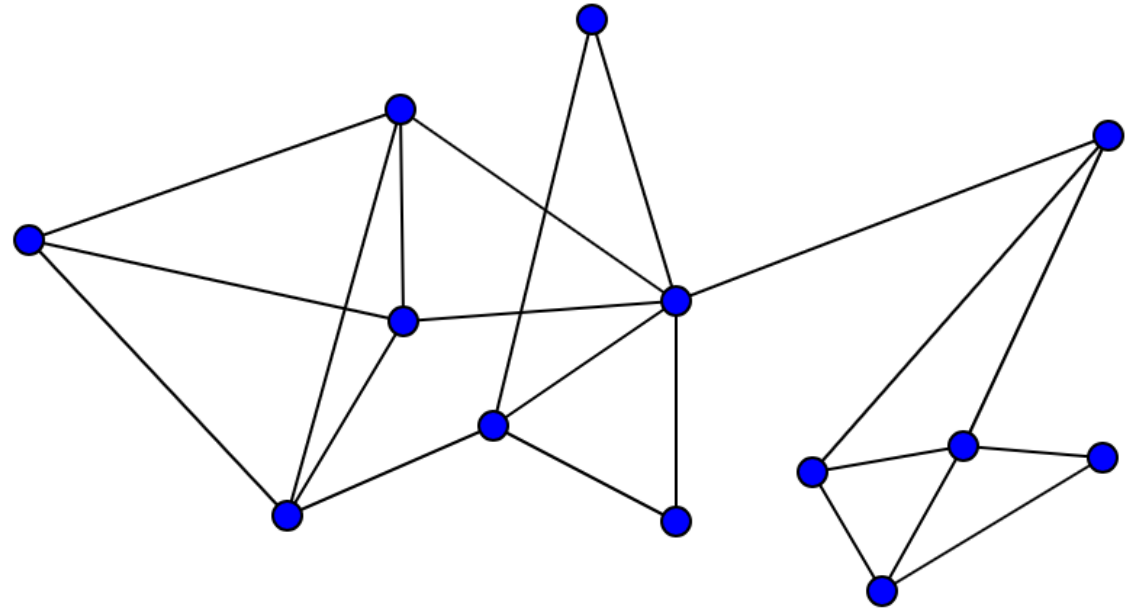
Talya Eden

Reut Levi

Dana Ron

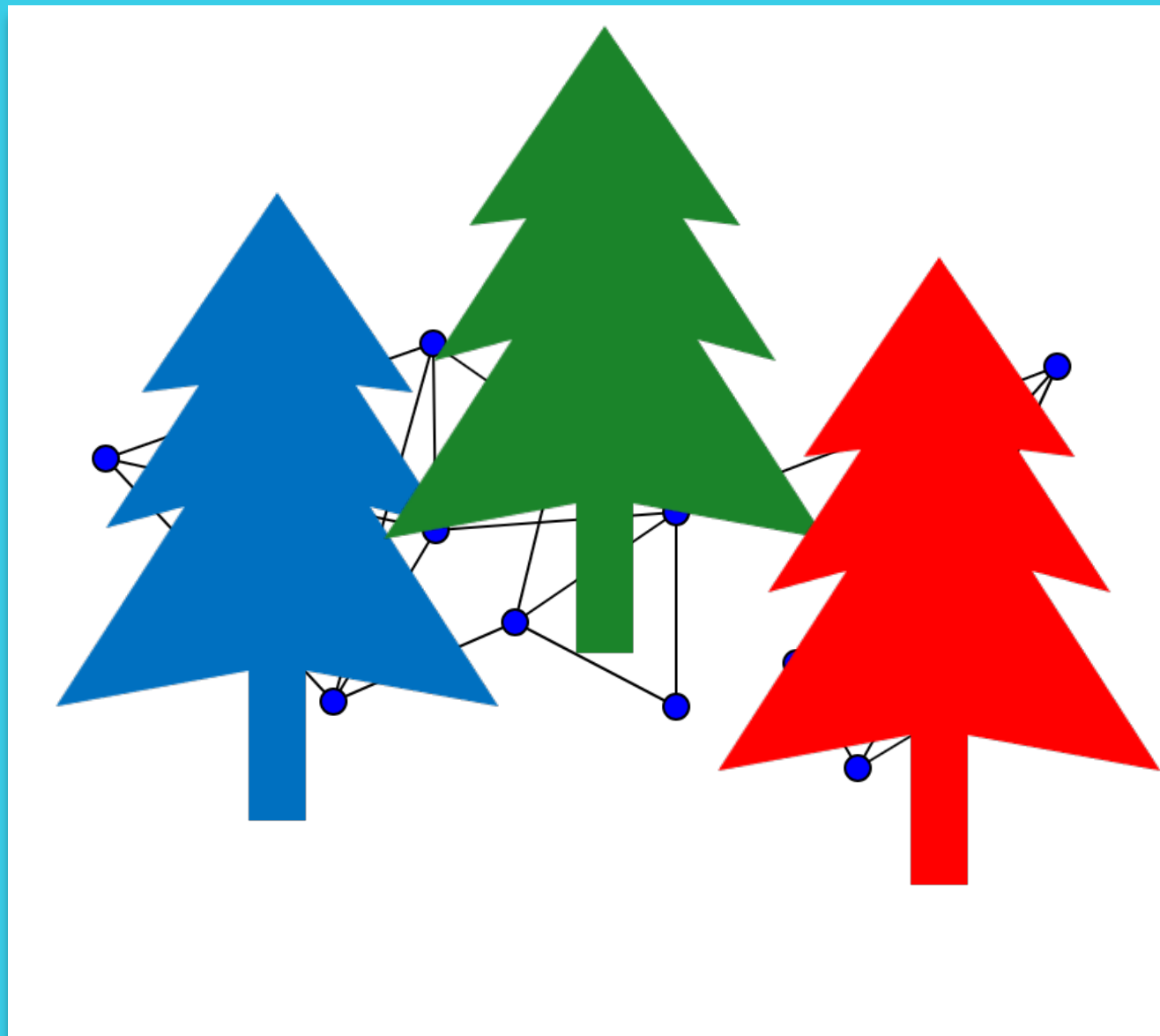
Arboricity

Minimal number of forests required to cover G



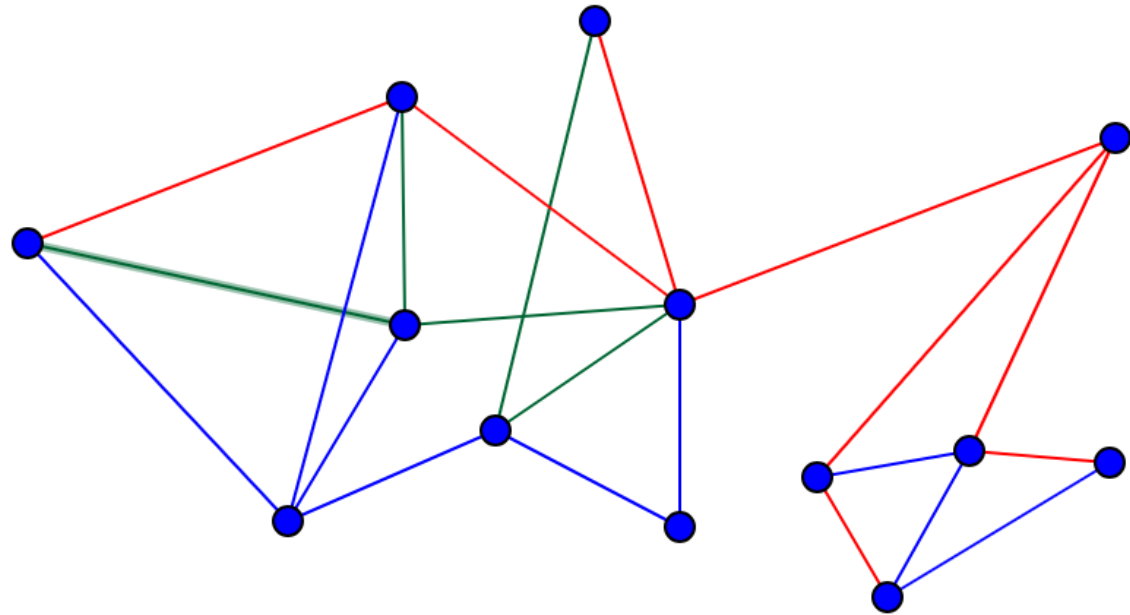
Arboricity - Definitions

Minimal number of forests
required to cover G



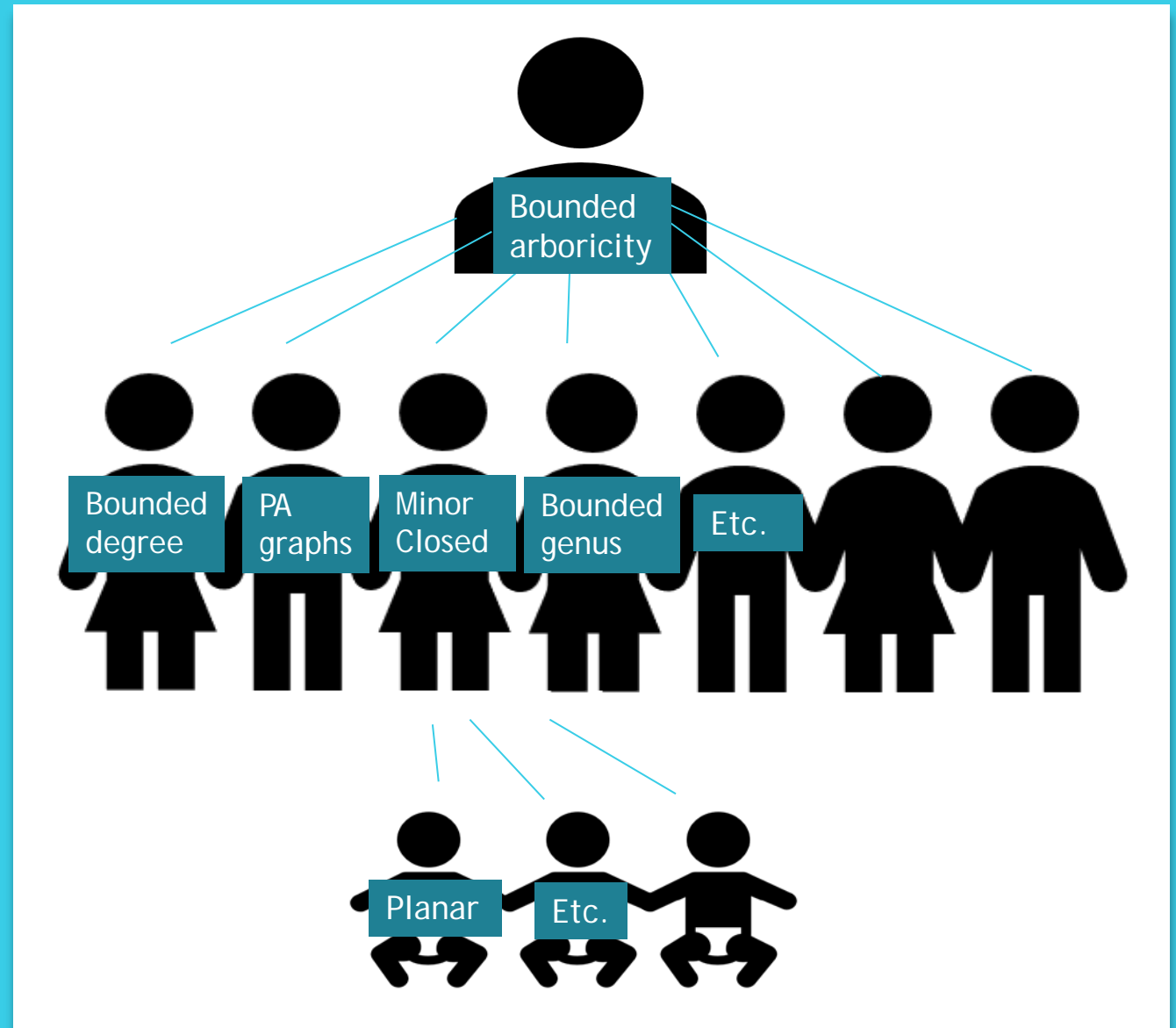
Arboricity - Definitions

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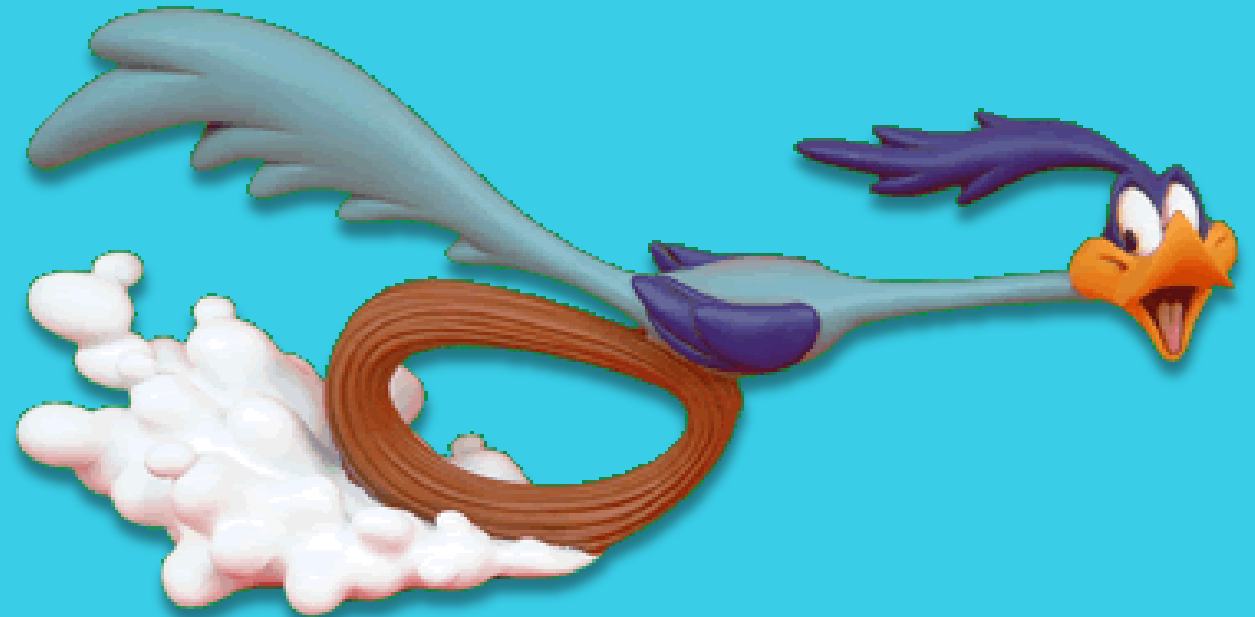
Large Family of Graphs

- Bounded Degree Graphs
- Randomly Generated Preferential Attachment Graphs
- Minor Closed Graphs
 - Planar Graphs
 - Graphs with Bounded Tree-Width
- Bounded Genus Graphs



Many Applications

- Faster algorithms
- Better approximation ratios
- Np-Hard \Rightarrow
Fixed parameter tractable



Tolerantly Testing

- ϵ -close vs. 3ϵ -far

CLOSE!





Thanks! (: